

## ABSTRACT

In accordance with the teachings described herein, systems and methods are provided for battery capacity estimation. A profile table may be used that relates a plurality of battery profile values with a plurality of operating parameter values. The profile table may be  
5 accessed to translate one or more measured operating parameters into one or more corresponding battery profile values. One or more of the battery profile values may be adjusted by a correction factor to generate a corrected battery profile value. The available capacity of the battery may be calculated using the corrected battery profile value. The correction factor may then be automatically calibrated by using an estimated battery profile  
10 value calculated from the one or more measured operating parameter.